## Sickle Cell Disease

Did you know that worldwide around 300,000 babies are born with sickle cell disease every year?

Did you know that Sickle Cell Disease (SCD) originated in at least four different parts of Africa, and from there it has spread across the world?

The Rights of Persons with Disabilities Act, 2016 defines SCD as a severe hereditary form of anemia in which a mutated form of hemoglobin distorts the red blood cells into a crescent shape at low oxygen. It is a genetic disorder that affects the whole life of the affected patient.

- It is most common in the tribal population of India, but occurs in nontribals too.
- The disease makes the shape of the blood cells look like a sickle, hence the name, sickle cell disease.
- The abnormal sickle shape instead of the normal round shape of the cells can lead to a range of health problems.

**Symptoms** start in early childhood and vary from person to person. Some of them include-

- Anemia
- Necrosis
- · Spleen damage
- · Acute chest syndrome and so on

**Sickle cell disease can cause episodes** of severe pain, known as crises, as well as organ damage, infections, and other complications.

Treatment for sickle cell disease can include

- Blood transfusion
- Medications to prevent complications
- Bone marrow transplants in some cases

Despite the challenges they face, people with sickle cell disease can lead full and meaningful lives. They develop coping skills and resilience, and many become advocates for themselves and others with the disease.

**SCD isn't contagious.** In some cases in fact, bone marrow/stem cell transplant can cure SCD.

The legendary **Jazz musician Miles Davis** was diagnosed with sickle cell anemia in 1961. Famous **Super Bowl champ Santonio Holmes** also has SCD.

In India, <u>The National Sickle Cell Anemia Elimination Mission</u> has been formed by the Ministry of Tribal affairs, to improve care of SCD patients for their better future and to lower the prevalence of the disease through multi-faced coordinated approach towards screening and awareness.